REMARKS

The Office Action dated November 24, 2004 has been received and carefully noted. The following amendment to claims 1 and 9 and remarks are submitted as a full and complete response thereto. The amendments to claims 1 and 9 are made to improve clarity of the features recited therein.

Claims 1-16 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 102:

In the Office Action, at page 2, claims 1, 5, 6, 7, 9, 13, 14, and 15 were rejected under 35 U.S.C. § 102 as being anticipated by U. S. Patent No. 5,615,364 to Marks ("Marks"). The Office Action took the position that Marks describes all the recitations of independent claims 1 and 9 and related dependent claims. This rejection is traversed and reconsideration is requested.

Independent claim 1, upon which claims 2-8 are dependent, recites a method for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application. The device has an active processor system and a standby processor system. The method includes providing an identical standby copy of an active database located on the active processor system, on the standby processor system, and monitoring the active processor for a failure, assuming control by the standby processor system assumes control when the failure is detected. The switching from the active database to the standby database is transparent to the external application.

Independent claim 9, upon which claims 10-16 are dependent, recites a system for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application, the device having an active processor system and a standby processor system. The system includes standby means for providing an identical standby copy of an active database located on the active processor system, on the standby processor system, monitor means for monitoring the active processor for a failure, control means for assuming control by the standby processor system assumes control when the failure is detected. The switching from the active database to the standby database is transparent to an external application.

As will be discussed below, the cited reference of Marks fails to disclose or suggest the elements of any of the presently pending claims.

Marks generally describes a redundant system which makes a backup database invisible or transparent to the user and which automatically accomplishes synchronization without any special effort on the part of the user. See column 2, lines 6-10. In the system, each database runs on its own computer with the communication agent being a resident database package. See column 3, lines 1-2. The communication agent provides communications between the databases. Upon receipt of a message, the communications agent sends the message to a remote communication agent with a backup database. See column 3, lines 5-14. If malfunction occurs, the backup database takes over. See column 3, lines 15-20.

However, Marks fails to teach or suggest, "wherein switching from the active database to the standby database is transparent to the external application," as recited in independent claims 1 and 9. It appears that Marks is limited to providing that the backup database is transparent. No description is provided in Marks suggesting that the switching from the communications agent to the backup database is transparent. As recited in independent claims 1 and 9, "the switching ...is transparent to the external application." In contrast, Marks provides that the database is transparent to the user. Accordingly, Applicants respectfully assert that Marks fails to teach or suggest all the recitations of independent claims 1 and 9.

One of the many advantages of the present invention is that the system and method for providing persistency fault tolerant data allow for maintaining a checksum for each record, which not only guarantees efficiency, but also makes failover transparent. See page 11, lines 5-10, of the present Specification. Marks does not provide for a checksum as in the present invention.

Accordingly, in view of the foregoing, it is respectfully requested that independent claims 1 and 9 and related dependent claims be allowed.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at page 3, claims 2-4 and 10-12 were rejected under 35 U.S.C. § 103 as being unpatentable over Marks and U.S. Patent No. 6,411,969 to Tam ("Tam"). The Office Action took the position that Marks and Tam disclose all the

aspects of dependent claims 2-4 and 10-12. This rejection is traversed and reconsideration is requested.

Dependent claims 2-4 depend from independent claim 1 and dependent claims 10-12 depend from independent claim 9. Because the combination of Marks and Tam must teach all the recitations of the base claim and any intervening claims of dependent claims 2-4 and 10-12, the arguments presented above supporting the patentability of independent claims 1 and 9 over Marks are incorporated herein.

Tam generally describes a method for developing back-up copies of a source database by providing incremental and accumulate dump commands from various multiple-Users which enable a selection of certain files which are identified independently of time-factor for dumping selectively either onto a separate destination medium of disk or tape. However, similarly to Marks, Tam does not teach or suggest, at least, "wherein switching from the active database to the standby database is transparent to the external application," as recited in independent claims 1 and 9. Nothing in Tam describes that switching from an active database to a standby database is transparent to an external application. Instead, Tam provides a different application of reducing total back-up time of data.

The descriptions of the system and method of Tam do not broach the concept of providing a method and apparatus to provide persistency fault tolerant data stored in a database on a device in a networked environment for an external application, in

accordance with an aspect of the present invention. Thus, even if Marks and Tam are combined as proposed in the Office Action, Applicants respectfully assert that a combination thereof would fail to teach or suggest all the recitations of independent claim 1, for instance, "wherein switching from the active database to the standby database is transparent to the external application."

Further, the various dependent claims also recite novel features in accordance with different aspects of the present invention. For example, dependent claims 2 and 10 recite, "keeping a compressed backup copy of the database with signature on the active processor system and the standby processor system." The Office Action correctly recognized that Marks fails to teach or suggest the recitations of dependent claims 2 and 10. Thus, the Office Action refers to Tam as providing for such recitations. However, Tam simply provides that a database is backed up using a tape or a disk, where the following information is provided: tape name, cycle number, version number, workers, serial number, compression or non-compression, density, and SCRATCHPOOL option. See column 6, lines 30-35.

Applicants respectfully assert that by merely providing compression or non-compression information, such information does not teach the particular claimed features recited in dependent claims 2 and 10 of keeping in at least two systems (i.e., the active processor system and the standby processor system) a compressed backup copy of the database with signature. See column 9, lines 66-67. Nothing in Tam describes keeping a

compressed backup copy of a database. Emphasis added. Instead, from the description provided in Tam, the system essentially reduces a total back-up time by storing only those data blocks modified since the last storage or "dumping." Accordingly, it is the Applicants' position that a combination of Marks and Tam fails to teach or suggest all the recitations of independent claims 1 and 9.

Accordingly, in view of the foregoing, it is respectfully requested that independent claims 1 and 9 and related dependent claims 2-4 and 10-12 be allowed.

In the Office Action, at page 4, claims 8 and 16 were rejected under 35 U.S.C. § 103 as being unpatentable over Marks, U.S. Patent No. 5,317,742 to Bapat ("Bapat"), and publication "Structure of Management Information Version 2(SMIv2)" by McCloghrie et al. ("McCloghrie"). The Office Action took the position that Marks, Bapat, and McCloghrie disclose all the aspects of dependent claims 8 and 16. This rejection is traversed and reconsideration is requested.

Dependent claim 8 depends from independent claim 1 and dependent claim 16 depends from independent claim 9. Because the combination of Marks and Tam must teach, individually or combined, all the recitations of the base claim and any intervening claims of dependent claims 2-4 and 10-12, the arguments presented above supporting the patentability of independent claims 1 and 9 over Marks are incorporated herein.

Bapat generally describes a Structure of Management Information (SMI) translated to a schema definition which is used to design the formats and templates of data structures within a database, within which actual information content will be stored. See column 7, lines 59-64. In turn, McCloghrie generally describes Internet protocol standards. However, Bapat and McCloghrie do not cure the deficiencies of Marks and, a combination thereof fails to teach or suggest all the recitations of independent claims 1 and 9. For instance, Bapat and McCloghrie are silent as to teaching or suggesting, for instance, "wherein switching from the active database to the standby database is transparent to the external application," as recited in independent claims 1 and 9. Thus, Applicants respectfully assert that a combination of Marks, Bapat, and McCloghrie fails to teach or suggest all the recitations of independent claims 1 and 9.

One of the many advantages of the system and method of the present invention provides an advantage of enhancing fault tolerance by combining compressed backup and active/standby. None of the references cited provide such advantage.

Accordingly, in view of the foregoing, it is respectfully requested that independent claims 1 and 9 and related dependent claims 8 and 16 be allowed.

CONCLUSION:

In view of the above, Applicants respectfully submit that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art.

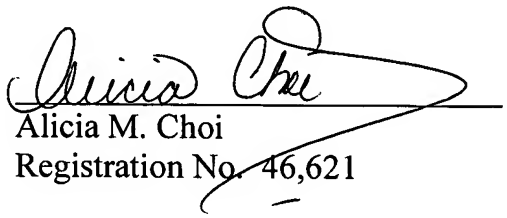
Applicants further submit that the subject matter is more than sufficient to render the claimed invention unobvious to a person of skill in the art. Applicants therefore respectfully request that each of claims 1-16 be found allowable and that this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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